1. A prediction method for lipidosis by a compound, which comprises:

5 (1) detecting (a) phenylacetylglycine and/or phenylacetylglutamine, or an optionally chosen metabolic intermediate in the metabolic pathway from phenylalanine to phenylacetylglycine or phenylacetylglutamine, and (b) hippuric acid or an optionally chosen metabolic intermediate in the

10 metabolic pathway from phenylalanine to hippuric acid, in a sample collected from a mammal receiving the compound or a mammalian cell or tissue culture exposed to the compound, and (2) predicting the compound's potential for inducing lipidosis with the quantitative ratio of the two as the index.

15

2. The method of claim 1, wherein the quantitative ratio of phenylacetylglycine and/or phenylacetylglutamine and hippuric acid is used as the index.

20 3. The method of claim 1, wherein the sample is urine, serum or plasma.

4. The method of claim 1, wherein the cell or tissue is derived from the liver, kidney or lung, or is a lymphocyte.

25

5. The method of claim 1, wherein the lipidosis develops as one or more conditions selected from the group consisting of phospholipidosis, steatosis and sphingolipidosis.

30 6. A diagnostic method for lipidosis or a disease related thereto in a mammal, which comprises:
(1) detecting (a) phenylacetylglycine and/or phenylacetylglutamine, or an optionally chosen metabolic intermediate in the metabolic pathway from phenylalanine to

phenylacetylglycine or phenylacetylglutamine, and (b) hippuric acid or an optionally chosen metabolic intermediate in the metabolic pathway from phenylalanine to hippuric acid, in a sample collected from a mammal, and

5 (2) making a diagnosis with the quantitative ratio of the two as the index.

7. The method of claim 6, wherein the quantitative ratio of phenylacetylglycine and/or phenylacetylglutamine and hippuric

10 acid is used the index.

8. The method of claim 6, wherein the sample is urine, serum or plasma.

15 9. The method of claim 6, wherein the lipidosis is hereditary lipidosis, drug-induced lipidosis or fatty acid metabolism homeostasis abnormalities.

10. The method of claim 6, wherein the disease is selected

20 from the group consisting of hyperlipemia, atherosclerosis, arteriosclerosis, myocardial infarction, fatty liver, hepatitis, liver cirrhosis, diabetes mellitus, dementia, Alzheimer's disease, heart disease and chronic fatigue syndrome.

25